

REMARKS

Status of the Claims

Claims 34-35, 37-40, 42-44, 46, 49-51, 54, 56-58, and 60-61 are pending in the present application, Claims 1-33, 36, 41, 45, 47, 48, 52, 53, 55 and 59 having been previously canceled Claims 34, 42, 54, 56, 60 and 61 have been amended to more clearly define the invention, and Claim 46 has been amended to correct a typographical error.

Claims Rejected Under 35 U.S.C. 103(a)

The Examiner has rejected Claims 34, 35, 37-40, 42-44, 46, 49-51, 54, 56-58, and 60-61 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,981,956 (Stern) in view of U.S. Patent Publication No. 2002/0008191 (Faska et al. – hereinafter referred to as "Faska").

In the interest of reducing the complexity of the issues for the Examiner to consider in this response, the following discussion focuses on independent Claims 34, 42, 54, 56, 60, and 61. The patentability of each remaining dependent claim is not necessarily separately addressed in detail. However, applicants' decision not to discuss the differences between the cited art and each dependent claim should not be considered as an admission that applicants concur with the Examiner's conclusion that these dependent claims are not patentable over the disclosure in the cited references. Similarly, applicants' decision not to discuss differences between the prior art and every claim element, or every comment made by the Examiner, should not be considered as an admission that applicants concur with the Examiner's interpretation and assertions regarding those claims. Indeed, applicants believe that all of the dependent claims patentably distinguish over the references cited. In any event, a specific traverse of the rejection of each dependent claim is not required, since dependent claims are patentable for at least the same reasons as the independent claims from which the dependent claims ultimately depend.

Patentability of Independent Claims 34, 42, 54, 56, 60, and 61

Significant differences exist between the recited subject matter and the cited art because the cited art does not teach or suggest that images of the object are dispersed across the detector, so that pixels of different images corresponding to an identical portion of the object are not coincident. This concept is best illustrated in FIGURE 3 of the pending application.

Referring to FIGURE 3, note that an object 316 includes a plurality of features 320, 322, 324, and 326. Probes have been attached to each different feature. Significantly, the probe attached to

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feature 320 includes four different optical signaling components; a blue component, a green component, a yellow component, and a red component. Note that an image of feature 320 appears in the blue channel, the green channel, the yellow channel, and the red channel of the detector, where each different spectral channel of the detector is dispersed onto a different portion of the detector. In other words, four different spectral images of feature 320 are dispersed across four different distinct portions of the detector. Significantly, even though the red image of feature 320 and the yellow image of feature 320 are specifically corresponding to the same portion of object 316 (i.e., they are both images of feature 320), the red image and the yellow image *are not coincident* on the detector.

With respect to the cited art, Stern teaches that light should be spectrally dispersed across a plurality of different detectors. Faska discloses a detector that is capable of simultaneously detecting two or more selected wavelengths of light on a pixel registered basis. It must be recognized that the pixel registered basis noted by Faska represents ensuring that pixels corresponding to the same portion of an object are coincident on Faska's detector. This is achieved by stacking different detection elements on top of each other. Faska's detector is multi-layered. If Faska's detector were used to image object 316 of applicants' FIGURE 3, then the red image and yellow image (assuming for the moment that Faska's detector is responsive only do two different wavelengths) of feature 320 would be coincident on the detector (they would be stacked one on top of another). This is distinguishably different than what applicants have claimed. While variations in language have been employed in each independent claim, each independent claim distinguishes over the cited art for substantially the same reason (that applicants spectrally disperse a plurality of different images across different portions of the detector, and according to Faska, light is not spectrally dispersed across different portions of the detector, rather different spectrums of light are detected by different layers of the detector, where light corresponding to a specific part of an object is detected by different layers that are coincident on the detector). If additional distinguishing language is required, applicants can further amend the claims to recite that the images are laterally dispersed across the detector (noting that Faska's detector responds to different wavelengths at different depths, depth being distinguishable from different lateral positions).

The cited art simply does not teach or suggest modifying Faska's single detector to function in an equivalent manner. Accordingly, all of the claims now remaining in the application define patentable subject matter that is neither anticipated nor obvious in view of the prior art cited. Since

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dependent claims inherently include all of the recitation of the independent claim on which they ultimately depend, for at least the same reasons as noted above in connection with the independent Claims, the rejection of the dependent Claims should also be withdrawn.

The Examiner is thus requested to pass the present application to issue in view of the amendments and the remarks submitted above. If there are any questions that might be addressed by a further telephone interview, the Examiner is invited to telephone the undersigned attorney, at the number listed below.

Respectfully submitted,

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MCK:bmd